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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,563	06/30/2003	Michael J. Berardi	60655.0100	2297

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SNELL & WILMER
ONE ARIZONA CENTER
400 EAST VAN BUREN
PHOENIX, AZ 85004-2202

EXAMINER	
HESS, DANIEL A	

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding..

Office Action Summary	Application No.	Applicant(s)	
	10/611,563	BERARDI ET AL.	
	Examiner	Art Unit	
	Daniel A. Hess	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-15,19,23-44 and 46-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *24-29* is/are allowed.

6)☒ Claim(s) *1-4, 7-15, 19, 23, 30-44, 46-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to Applicant's amendment and arguments of 2/16/2006, which have been placed in the electronic file of record.

In light of applicant's amendments, claim objects and rejections under 35 USC 112 are hereby withdrawn.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 39, 40, 50 and 51 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,581,839. Although the

conflicting claims are not identical, they are not patentably distinct from each other because in both instances, there is a transparent "machine recognizable compound containing an infrared blocking material associated with and substantially covering" the card surface which is a distinguishing feature over other similar cards.

Claims 57 and 58 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,581,839. Although the conflicting claims are not identical, they are not patentably distinct from each other because magnetic stripes on cards have long been employed to carry data, long before more modern features such as chips.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 9-11, 13, 14, 30, 33-36, 43, 47-49, 54-56, 59, 60 and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Tuttle et al. (US 5,988,510). Tuttle et al. teaches all of the elements and means of the above claims. For example, Tuttle et al. teaches the following:

Re claims 1, 62:

See column 7, lines 3-5: There is radio frequency communication with an interrogator. This occurs through a transponder (column 9, line 11). There is a transparent card layer, namely a transparent polyester film (column 7, lines 29-31). Layers of ink are added (column 7, lines 45-65) which "effect a complete opacity" (column 7, line 49). A conductive ink such as silver ink (column 7, lines 60+) is spread over the surface. If this is the case, then this would be machine recognizable because it would be opaque in the infrared (as well as visible) range.

This infrared blocking layer is associated with the transparent polyester layer in the sense that it is built on top of it. The language "associated with said card layer" can mean anything from abutting, to adjacent to, to formed upon, said card layer.

Re claim 2: Tuttle refers throughout, including at column 3, line 17, to his card as a smart card.

Re claim 4: Tuttle teaches (entire document) a card with and RFID transponder system (column 9, lines 5-15): "The memory 164 receives power when the integrated circuit 154 receives power. In one embodiment, the integrated circuit 154 further includes **transponder circuitry for radio frequency communications with an interrogator unit** 104. " Tuttle also shows that such smart cards can be used to **gain access**, an application which necessarily (column 1, lines 50-60): "Smart cards can also be used as keys to gain access to restricted areas, such as secure areas of buildings, or to access parking lots." Regarding the limitations of receiving an interrogation signal, authenticating the signal and transmitting account data, this is all standard. This simply means that communication with the transponder card is made and then an ID is transmitted from the card. Any card that is used to gain access must transmit an ID. The process of gaining access *is* authentication, and an circuit that is involved in this process

would therefore be an authentication circuit. A database system with which to communicate is also inherent because in order to decide whether to grant access, the system must check if a person seeking to gain access is a valid user.

Re claim 9-11, 13, 14: In Tuttle, it is the layers of ink which confer blocking, both in the visible and infrared (see discussion re claim 1, above). These layers thus can be said to be both visible and infrared inks.

Again, note that the independent claim does not require that the same substance is both an infrared block and transparent at the same time.

Re claim 30: Batteries are discussed throughout in Tuttle; see abstract, for example.

Re claim 33: See discussion re claim 1 above. In addition there is (fig. 5, ref. 22) a magnetic stripe on the card.

Re claim 34: Tuttle refers throughout, including at column 3, line 17, to his card as a smart card.

Re claim 35: Tuttle uses opaque inks.

Re claim 36: See discussion re claim 1 above. In addition there is (fig. 5, ref. 22) a magnetic stripe on the card. Further, there is (column 5, lines 55+) a hologram on the card in at least one embodiment.

Re claim 43: There is in Tuttle an antenna capable of sending and receiving a signal (column 8, line 6).

Re claims 47-49, 59, 60: It has already been discussed that the machine recognizable compound blocks the transmission of infrared light.

Re claims 54-56: There is (fig. 5, ref. 22) a magnetic stripe on the card of Tuttle et al. Further, there is (column 5, lines 55+) a hologram on the card in at least one embodiment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are. such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7, 8, 12, 23, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle et al.

Re claim 7, the presence and use of a second transponder system would have been an obvious repetition of parts in case a first interrogation system failed.

Re claim 8, additional transparent layers like the one Tuttle et al. has would have been obvious to add additional strength as well as durability.

Re claim 12: The range given for concentration of ink is very large and normal experimentation would likely arrive at a concentration somewhere in this very large range.

Re claim 23: As for having multiple transponders, this can be considered repetition of parts, with the clear advantage of redundancy in case one system breaks. One would have been motivated to have such a system so that two communication channels can be open simultaneously, increasing bandwidth, in the same way that a computer network has more bandwidth with more pathways.

Re claims 44 and 46: See figure 2 of Tuttle: transponder is in between card layers.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as applied to claim 1 above, in further view of Koshizuka et al. (US 5,407,893).

Tuttle lacks a teaching that the 2nd layer is extrusion-coated to the first.

Koshizuka teaches (column 10, lines 15-16 and 19-20) extrusion coating to bond layers together.

In view of Koshizuka's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known extrusion coating as taught by Koshizuka into the teachings of Kilmer because this helps achieve high stiffness and excellent durability (Koshizuka , column 1, lines 5-10).

Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as applied to claim 1 above, in view of Blumel et al. (US 4,672,021).

Tuttle fails to specifically point out the presence of one of a binder, UV absorber,

reflector, antioxidant, optical brightener, color shifter, chemical to improve processing, or a chemical to adjust rheological properties.

Blumel shows (see title; abstract, lines 8-11) a layer compound applied to a substrate having dye and a binder.

In view of Blumel's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known binder in a dye compound which is applied to a surface as taught by Blumel because, a binder helps facilitate sticking to the surface on which a compound is placed, and it is desirable to have a infrared-blocker stick permanently to the surface of the card of Tuttle.

Claims 19, 37, 38, 41, 42, 52, 53 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Riedl (US 5,928,788).

Re claim 19: Tuttle fails to teach the use of PET plastic in the card.

PET plastic is a known material in the art to achieve durability: Riedl uses PET compounds (column 2, line 52).

In view of Reidl's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known PET in the card of Tuttle et al. because, as Riedl notes (column 1, lines 45-50) they improve the temperature resistance and physical durability of the card as well as enhance recyclability.

Re claims 37, 41 and 42: Tuttle already shows sandwiching between two layers to form the card. As far as concerns IR film, this can simply be a plastic that is all-around opaque, since nothing anywhere in the claim language indicates that any layer must be transparent.

Re claim 38: Adhering card layers with adhesive or laminate is a technique which is employed in the vast majority of all plastic cards.

Re claim 52 and 53: It has already been discussed that the machine recognizable compound blocks the transmission of infrared light.

Re claim 61: In Tuttle's case, the 'infrared film' is simply a silver ink that covers everything. It is coextensive with the primary card layers.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Stock et al. (US 6011858).

Tuttle lacks biometric security.

Stock's entire patent is concerned with biometric security for a smart card.

In view of Stock's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known biometric security of stock in the smart card of Tuttle because this can reduce or eliminate fraudulent use of the card. As for connection with a power supply, this is a necessity.

Re claim 32: In one scenario or Stock (column 8, lines 5-15) data is exchanged between a card and a reader system; this is a merchant system.

Allowable Subject Matter

Claims 24-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to teach or fairly suggest a transparent card having two transponders, wherein there is a transponder system protocol/sequence controller configured to control the order of operation of the first transponder, second transponder, transponder system authentication circuit and transponder system database, the protocol sequence controller being in communication with at least one of said first transponder, second transponder, authentication circuit and transponder system database.

Response to Arguments

Applicant's arguments filed 2/16/2006 have been fully considered but they are not persuasive.

The most notable issue that the Examiner observes is that the claim language as it now reads is, for at least independent claims 1, 33, 36, 41 and 42, fairly broad because in each of this claims, there is only a requirement than a "portion" or a "layer" of the card be transparent.

This limitation is easily met, since for many cards, a transparent outer laminate or other transparent protective plastic is often present.

In claims 1, 33, 36, 41 and 42, there is not a specific requirement that the whole card must be transparent in the visible and blocking in the infrared, or that the very substance which blocks the entire card surface in the infrared is also transmitting in the visible range of the spectrum.

As written, the claim limitations could be met art that is relatively common. One could for example have an RFID card with a dense inner portion layer (which blocks both infrared and visible) and a transparent plastic protective layer (which may be transparent both in the infrared and visible ranges). Then the inner layer is machine recognizable, and an outer protective laminate meets the 'transparent' requirement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel A Hess
Examiner
Art Unit 2876
5/29/06

DANIEL STCYR
PRIMARY EXAMINER